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09/970,955	10/04/2001	A. James Smith JR.	Smith 5	2659

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EXAMINER
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DARROW, JUSTIN T

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 05/22/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/970,955

Applicant(s)

SMITH, JR.

Examiner

Justin T. Darrow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 33-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-42 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### **DETAILED ACTION**

1. Claims 1-42 have been presented for examination. Claims 1-42 are subject to a restriction and/or election requirement. Claims 1-32 have been elected with traverse and claims 33-42 have been withdrawn from consideration in a telephonic interview, 05/10/2002. Claims 1-32 have been examined.

### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-32, drawn to a method for securing access to passwords and personal identification numbers, a method for securing data and for providing secure access, a system for securing access to passwords and personal identification numbers with a MasterCode having ten characters associated with ten digits, a device for securing access to passwords and personal identification numbers, and a method for securing data, classified in class 713, subclass 184.
  - II. Claims 33-42, drawn to a method for using a grid to gain access to encrypted passwords in which the grid is broken into cells, classified in class 713, subclass 185.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions Group I and Group II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the different inventions have different modes of operation: Group I, disguising a

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password in a grid of characters; Group II, providing a grid with pictorial representations of users of subordinate devices. The different inventions also have different functions: Group I, decrypting passwords or data using a key decoded from the grid in which the passwords are disguised; Group II, gaining access to passwords after recreating a particular pictorial representation in the grid.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Henry J. Walsh on 05/10/2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-32. Affirmation of this election must be made by applicant in replying to this Office action. Claims 33-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Priority***

8. Acknowledgment is made of the claim for domestic priority of Application No. 09/891,132, filed on 06/25/2001, now abandoned, which in turn claims priority to 09/022,578, now U.S. Patent No. 6,253,328 B1, filed on 02/12/1998.
9. Applicant's claim for domestic priority under 35 U.S.C. 120 is acknowledged. However, the Application No. 09/022,578 upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 6-12 and 27-32 of this application. As per claims 6-12, Application No. 09/022,578 provides no written description of encrypting data using a graphical image as an encryption key (see page 8, lines 12-21 and page 9, lines 1-11). As per claims 27-32, Application No. 09/022,578 provides no support for masking data using a graphical image as a key (see page 8, lines 12-21 and page 9, lines 1-11).

***Oath/Declaration***

10. The declaration, filed 11/28/2001, is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The declaration is defective because:

The full name of each inventor (family name and at least one given name together with any initial) has not been set forth. The declaration states the full name of the sole inventor as "A. James Smith". However, the full name of the inventor is A. James Smith, Jr.

***Claim Objections***

11. Claim 6 is objected to because of the following informality: delete "access" in line 3. Appropriate correction is required.

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12. Claim 20 is objected to because of the following informality: delete "constants" in line 2 and replace with --consonants--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: numeric representations to characters. This rejection can be overcome by inserting --to form numeric representations of the characters of the MasterCode-- in line 5 of claim 21.

15. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 recites the limitations "said graphical" in line 2 and "said grid" in line 3. There is insufficient antecedent basis for these limitations in the claim.

***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1 and 2, 3, 4, and 5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 7, 8, and 10, respectively, of U.S. Patent No. 6,253,328 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the step of creating a pattern in claim 2 is equivalent to the step of embedding the mastercode of claim 2 of U.S. Patent No. 6,253,328 B1.

18. Claims 12, 13, 14, 15, 16, 17, 18, 19, and 20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12, 13, 14, 15, 16, 17, 18, 19, and 20, respectively, of U.S. Patent No. 6,253,328 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the feature of a translator expanding a character sequence is equivalent to feature of a means for interspersing additional characters of claim 12 of U.S. Patent No. 6,253,328 B1.

19. Claims 21, 23, 25, and 26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21, 23, 24, and 25,

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respectively, of U.S. Patent No. 6,253,328 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the feature of a translator assigning numeric representations is equivalent to feature of a means for creating a word list of claim 21 of U.S. Patent No. 6,253,328 B1.

***Claim Rejections - 35 USC § 102***

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. Claims 6, 27, and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jackson, U.S. Patent No. 5,793,871 A.

As per claim 6, Jackson illustrates a method for securing data comprising: creating a readout beam in two dimensions (see column 6, lines 27-42 and figure 2A, item 207, E<sub>1</sub>); encrypting the stripped data stream using the readout beam (see column 6, lines 43-64 and figure 2A, items stripped data, 206, SLM, 209, E<sub>2</sub>, 210, E<sub>2</sub>’); and providing the detailed information regarding the original reference beam for decryption of the enciphered data stream (see column 7, lines 39-60; figure 2A, item 215; and figure 2b, items enciphered data, 230, 231, 233, 234, and 235).

As per claim 27, Jackson illustrates a method for securing data comprising: creating a readout beam in two dimensions (see column 6, lines 27-42 and figure 2A, item 207, E<sub>1</sub>); and

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encrypting the stripped data stream using the readout beam (see column 6, lines 43-64 and figure 2A, items stripped data, 206, SLM, 209,  $E_2$ , 210,  $E_2'$ ).

As per claim 28, Jackson further specifies forming a scramble phase component in x and y coordinates (see column 6, lines 43-64 and figure 2A, items stripped data, 206, SLM, 209,  $E_2$ , 210,  $E_2'$ ); selecting pixels from this component to form a factor (see column 6, lines 43-54).

22. Claims 6-11 and 27-32 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Cass et al., U.S. Patent No. 5,946,414 A.

As per claim 6, Cass et al. show a method for securing data comprising: defining signal blocks (see column 13, lines 50-57 and figure 1, item 30); encrypting a message m with the signal blocks (see column 13, lines 57-67 and figure 1, items 200 and 70); and aligning the signal blocks for recovering the message m (see column 29, lines 15-41 and figure 43, items 802, 820, 890, and 898).

As per claim 7, Cass et al. further describe that the signal blocks is formed from data items indicating "0" and "1" (see column 14, lines 8-12 and figure 2) utilizing dimensions of  $K \times K$  units of color cells (see column 14, lines 12-16 and figure 2).

As per claim 8, Cass et al. additionally depict different color modulations along a spatial vector in two dimensions applied to and stored with a signal block (see column 14, lines 35-53 and figure 2).

As per claim 9, Cass et al. also specify a combining process for the color modulations of the signal blocks along the spatial vector in two dimensions (see column 17, lines 30-41 and figures 9 and 10).

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As per claim 10, Cass et al. embody this combining process defined by a character string of "0"s and "1"s (see column 17, lines 30-41 and figures 9 and 10).

As per claim 11, Cass et al. alternatively depict spatially in the KxK units (see column 17, lines 30-45 and figures 8, 9, and 10).

As per claim 27, Cass et al. show a method for securing data comprising: defining signal blocks (see column 13, lines 50-57 and figure 1, item 30); and encrypting a message m with the signal blocks (see column 13, lines 57-67 and figure 1, items 200 and 70)

As per claim 28, Cass et al. further depict spatially formed and arranged signal blocks (see column 16, lines 16-19 and figure 3, step 280) for encryption (see column 16, lines 1-12 and figure 4, item 74).

As per claim 29, Cass et al. describe the message m as consisting of character symbols in a language (see column 15, lines 32-44 and figure 1, item 20); defining signal blocks in terms of "0"s and "1"s (see column 13, lines 50-57; column 14, lines 28-34; figure 1, item 30; and figure 2, items 32 and 33); and encrypting the message m with color modulation of the signal blocks (see column 16, lines 29-53; figure 3, step 280; and figure 4, items 22 and 74).

As per claim 30, Cass et al. moreover embody the message m as consisting of character symbols in a language such as ASCII or UNICODE (see column 15, lines 32-44 and figure 1, item 20).

As per claim 31, Cass et al. also disclose that the signal blocks in terms of "0"s and "1"s (see column 13, lines 50-57; column 14, lines 28-34; figure 1, item 30; and figure 2, items 32 and 33); and that the relationship is the ordered sequence of data (see column 16, lines 29-63; figure 2, items 32 and 33; and figure 4, items 22, 23, 24, 32, 33, and 74).

As per claim 32, Cass et al. also explain the relationship as tracing out the message corresponding to the image (see column 16, lines 29-63; figure 2, items 32 and 33; and figure 4, items 22, 23, 24, 32, 33, and 74).

***Allowable Subject Matter***

23. Claims 1-5, 12-20, 21, 23, 25, and 26 would be allowable by terminal disclaimer to overcome the nonstatutory double patenting rejection, set forth in this Office action.

24. Claims 21, 23, 25, and 26 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office action and by terminal disclaimer to overcome the nonstatutory double patenting rejection, set forth in this Office action.

25. Claims 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office action and either by amendment in independent form including all of the limitations of the base claim and any intervening claims or by terminal disclaimer.

26. The following is a statement of reasons for the indication of allowable subject matter: Claims 1-5, 12-20, and 21-26 are drawn to a method, a system, and a device for securing access passwords and personal identification numbers. The closest prior art, Smith, U.S. Patent No. 312,665 A, discloses a similar method, system, and devices. However, Smith neither teaches nor suggests the creation of actual words from a character sequence. This distinct feature explicitly recites in independent claims 1, 12, and 21 renders claims 1-5, 12-20, and 21-26, respectively to have allowable subject matter.

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*Telephone Inquiry Contacts*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin T. Darrow whose telephone number is (703) 305-3872 and whose electronic mail address is justin.darrow@uspto.gov. The examiner can normally be reached Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón, Jr., can be reached at (703) 305-1830.

The fax numbers for Formal or Official faxes to Technology Center 2100 are (703) 305-0040 and (703) 746-7239. Draft or Informal faxes for this Art Unit can also be submitted to (703) 746-7240. In order for a formal paper transmitted by fax to be entered into the application file, the paper and/or fax cover sheet must be signed by a representative for the applicant. Faxed formal papers for application file entry, such as amendments adding claims, extensions of time, and statutory disclaimers for which fees must be charged before entry, must be transmitted with an authorization to charge a deposit account to cover such fees. It is also recommended that the cover sheet for the fax of a formal paper have printed "**OFFICIAL FAX**". Formal papers transmitted by fax usually require three business days for entry into the application file and consideration by the examiner. Formal or Official faxes including amendments after final rejection (37 CFR 1.116) should be submitted to (703) 746-7238 for expedited entry into the application file. It is further recommended that the cover sheet for the fax containing an amendment after final rejection have printed not only "**OFFICIAL FAX**" but also "**AMENDMENT AFTER FINAL**".

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

*Justin Darrow*

Justin T. Darrow

Patent Examiner

Technology Center 2100

May 20, 2002